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R. Ozawa, A. Yamane, K. Morikawa, M. Ohwada, K. Suzuki and H. Fukutani, Angle-resolved UPS study of the oxygen-induced 2×1 surface of Cu(110) 346 (1996) 237

Gallium

J.A. Leiro and M.H. Heinonen, Surface plasmons in NiGa and CoGa alloys 346 (1996) 73

Gold

A. Endo and S. Ino, Energy and angular distribution of secondary electrons emitted from Si(111)-7×7, $\sqrt{3} \times \sqrt{3}$-Ag and 5×2-Au surfaces 346 (1996) 40

Graphite

H. Asada, M. Takechi and H. Seiyama, Displacement transition in Kr/cyclohexane adsorbed on graphite: what is the driving force? 346 (1996) 294

Hydrogen

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

Nickel

V.A. Ukraintsev and J.T. Yates, Jr., The role of nickel in Si(001) roughening 346 (1996) 31

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

Nitrogen

V. Djamo, D. Teillet-Billy and J.P. Gauyacq, Resonant vibrational excitation of N_2 molecules physisorbed on a metal surface: effect of the molecular axis orientation 346 (1996) 253

Noble gases

H. Asada, M. Takechi and H. Seiyama, Displacement transition in Kr/cyclohexane adsorbed on graphite: what is the driving force? 346 (1996) 294

Palladium

B. Lesiak, J. Zemek, P. de Haan and A. Jozwik, XPS study of Pd/Co multilayers: identification of Pd and Co interface bonding states by pattern recognition methods 346 (1996) 79

A. Clotet and G. Pacchioni, Acetylene on Cu and Pd(111) surfaces: a comparative theoretical study of bonding mechanism, adsorption sites, and vibrational spectra 346 (1996) 91

A. Sandell, J. Libuda, M. Bäumer and H.-J. Freund, Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species 346 (1996) 108

A. Wachter, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Pd(100) surface 346 (1996) 127

Rhodium

A. Eichler, J. Hafner, J. Furthmüller and G. Kresse, Structural and electronic properties of rhodium surfaces: an ab initio approach 346 (1996) 300

Ruthenium

J. Vaari, J. Lahtinen and P. Hautojärvi, A bimetallic Ru–Co surface prepared by $Ru_3(CO)_{12}$ adsorption on Co(0001) 346 (1996) 11

M. Gierer, H. Bludau, H. Over and G. Ertl, The bending mode vibration of CO on Ru(0001) studied with low-energy electron-diffraction 346 (1996) 64

Silicon

D. Klyachko, P. Rowntree and L. Sanche, Oxidation of hydrogen-passivated silicon surfaces induced by dissociative electron attachment to physisorbed H_2O 346 (1996) L49

J.K. Simons, S.P. Frigo, J.W. Taylor and R.A. Rosenberg, Adsorption of saturated hydrocarbons on the Si(111)-7 × 7 surface studied by photoelectron and photon stimulated desorption spectroscopies 346 (1996) 21

V.A. Ukraintsev and J.T. Yates, Jr., The role of nickel in Si(001) roughening 346 (1996) 31

A. Endo and S. Ino, Energy and angular distribution of secondary electrons emitted from Si(111)-7 × 7, $\sqrt{3} \times \sqrt{3}$-Ag and 5 × 2-Au surfaces 346 (1996) 40

K. Kakitani, R. Sakagami, T. Kawamura, Y. Yagi and A. Yoshimori, Step-induced short range order on Si(100) reconstructed surfaces 346 (1996) 55

Silver

A. Endo and S. Ino, Energy and angular distribution of secondary electrons emitted from Si(111)-7 × 7, $\sqrt{3} \times \sqrt{3}$-Ag and 5 × 2-Au surfaces 346 (1996) 40

Sulphur

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

Zirconium

C.-S. Zhang, B. Li and P.R. Norton, The initial stages of interaction of hydrogen with the Zr(10$\bar{1}$0) surface 346 (1996) 206

Compounds (non-molecular solids)

Aluminum oxide

A. Sandell, J. Libuda, M. Bäumer and H.-J. Freund, Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species 346 (1996) 108

Gallium arsenide

J.E. Van Nostrand, S.J. Chey, D.G. Cahill, A.E. Botchkarev and H. Morkoç, Surface morphology of GaAs(001) grown by solid- and gas-source molecular beam epitaxy 346 (1996) 136

G.W. Anderson, M.C. Hanf, X.R. Qin, P.R. Norton, K. Myrtle and B. Heinrich, Epitaxial growth of Fe on sulphur-passivated GaAs(100): a method for preventing As interdiffusion 346 (1996) 145

Magnesium oxides

C. Minot, M.A. Van Hove and J.-P. Biberian, Theory of CO adsorption on MgO(100): the influence of intermolecular interactions on the CO orientation 346 (1996) 283

Niobium carbide

W. Hayami, R. Souda, T. Aizawa, S. Otani and Y. Ishizawa, Structural analysis of NbC(111)–O and NbC(111)–D surfaces 346 (1996) 158

Niobium oxide

W. Hayami, R. Souda, T. Aizawa, S. Otani and Y. Ishizawa, Structural analysis of NbC(111)–O and NbC(111)–D surfaces 346 (1996) 158

Silicon carbide

M.A. Kulakov, G. Henn and B. Bullemer, SiC(0001)3 × 3–Si surface reconstruction – a new insight with a STM 346 (1996) 49

Titanium oxide

V.P. Holbert, S.J. Garrett, P.C. Stair and E. Weitz, The photochemistry of CD_3I adsorbed on the TiO_2(110) surface 346 (1996) 189

Molecules

Alkanes

J.K. Simons, S.P. Frigo, J.W. Taylor and R.A. Rosenberg, Adsorption of saturated hydrocarbons on the Si(111)-7 × 7 surface studied by photoelectron and photon stimulated desorption spectroscopies 346 (1996) 21

H. Asada, M. Takechi and H. Seiyama, Displacement transition in Kr/cyclohexane adsorbed on graphite: what is the driving force? 346 (1996) 294

Alkynes

A. Clotet and G. Pacchioni, Acetylene on Cu and Pd(111) surfaces: a comparative theoretical study of bonding mechanism, adsorption sites, and vibrational spectra 346 (1996) 91

Carbon monoxide

J. Vaari, J. Lahtinen, T. Vaara and P. Hautojärvi, An XPD and ISS study of the (2 × 2)-(CO + K) coadsorption structure on Co(0001) 346 (1996) 1

J. Vaari, J. Lahtinen and P. Hautojärvi, A bimetallic Ru–Co surface prepared by $Ru_3(CO)_{12}$ adsorption on Co(0001) 346 (1996) 11

M. Gierer, H. Bludau, H. Over and G. Ertl, The bending mode vibration of CO on Ru(0001) studied with low-energy electron-diffraction 346 (1996) 64

A. Sandell, J. Libuda, M. Bäumer and H.-J. Freund, Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species 346 (1996) 108

C. Minot, M.A. Van Hove and J.-P. Biberian, Theory of CO adsorption on MgO(100): the influence of intermolecular interactions on the CO orientation 346 (1996) 283

Carbonyl

J. Vaari, J. Lahtinen and P. Hautojärvi, A bimetallic Ru–Co surface prepared by $Ru_3(CO)_{12}$ adsorption on Co(0001) 346 (1996) 11

Carbonyls

A. Sandell, J. Libuda, M. Bäumer and H.-J. Freund, Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species 346 (1996) 108

Deuterium

W. Hayami, R. Souda, T. Aizawa, S. Otani and Y. Ishizawa, Structural analysis of NbC(111)–O and NbC(111)–D surfaces 346 (1996) 158

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

Hydrogen

C.-S. Zhang, B. Li and P.R. Norton, The initial stages of interaction of hydrogen with the Zr(10$\bar{1}$0) surface 346 (1996) 206

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

Hydrogen sulphide

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

Oxygen

W. Hayami, R. Souda, T. Aizawa, S. Otani and Y. Ishizawa, Structural analysis of NbC(111)–O and NbC(111)–D surfaces 346 (1996) 158

Water

D. Klyachko, P. Rowntree and L. Sanche, Oxidation of hydrogen-passivated silicon surfaces induced by dissociative electron attachment to physisorbed H_2O 346 (1996) L49

PHYSICAL STATE

Surfaces

Amorphous surfaces

D. Klyachko, P. Rowntree and L. Sanche, Oxidation of hydrogen-passivated silicon surfaces induced by dissociative electron attachment to physisorbed H_2O 346 (1996) L49

Polycrystalline surfaces

J.A. Leiro and M.H. Heinonen, Surface plasmons in NiGa and CoGa alloys 346 (1996) 73

Single crystal surfaces

M.A. Kulakov, G. Henn and B. Bullemer, SiC(0001)3 × 3–Si surface reconstruction – a new insight with a STM 346 (1996) 49

A. Clotet and G. Pacchioni, Acetylene on Cu and Pd(111) surfaces: a comparative theoretical study of bonding mechanism, adsorption sites, and vibrational spectra 346 (1996) 91

Low index single crystal surfaces

J. Vaari, J. Lahtinen, T. Vaara and P. Hautojärvi, An XPD and ISS study of the (2 × 2)-(CO + K) coadsorption structure on Co(0001) 346 (1996) 1

J. Vaari, J. Lahtinen and P. Hautojärvi, A bimetallic Ru–Co surface prepared by $Ru_3(CO)_{12}$ adsorption on Co(0001) 346 (1996) 11

K. Kakitani, R. Sakagami, T. Kawamura, Y. Yagi and A. Yoshimori, Step-induced short range order on Si(100) reconstructed surfaces 346 (1996) 55

M. Gierer, H. Bludau, H. Over and G. Ertl, The bending mode vibration of CO on Ru(0001) studied with low-energy electron-diffraction 346 (1996) 64

A. Wachter, K.P. Bohnen and K.M. Ho, Structure and dynamics at the Pd(100) surface 346 (1996) 127

J.E. Van Nostrand, S.J. Chey, D.G. Cahill, A.E. Botchkarev and H. Morkoç, Surface morphology of GaAs(001) grown by solid- and gas-source molecular beam epitaxy 346 (1996) 136

W. Hayami, R. Souda, T. Aizawa, S. Otani and Y. Ishizawa, Structural analysis of NbC(111)–O and NbC(111)–D surfaces 346 (1996) 158

C.-S. Zhang, B. Li and P.R. Norton, The initial stages of interaction of hydrogen with the Zr(10$\bar{1}$0) surface 346 (1996) 206

A.O. Taylor and D.O. Hayward, The adsorption of deuterium on sulphur-covered nickel (111) surfaces 346 (1996) 222

C. Minot, M.A. Van Hove and J.-P. Biberian, Theory of CO adsorption on MgO(100): the influence of intermolecular interactions on the CO orientation 346 (1996) 283

Vicinal single crystal surfaces

Y. Song and R. Gomer, Diffusion of oxygen on the Re(20$\bar{2}$1) plane 346 (1996) 243

Surface defects

V.A. Ukraintsev and J.T. Yates, Jr., The role of nickel in Si(001) roughening 346 (1996) 31

Interfaces

Single crystal epitaxy

G.W. Anderson, M.C. Hanf, X.R. Qin, P.R. Norton, K. Myrtle and B. Heinrich, Epitaxial growth of Fe on sulphur-passivated GaAs(100): a method for preventing As interdiffusion 346 (1996) 145

Solid–gas interfaces

J.K. Simons, S.P. Frigo, J.W. Taylor and R.A. Rosenberg, Adsorption of saturated hydrocarbons on the Si(111)-7 × 7 surface studied by photoelectron and photon stimulated desorption spectroscopies 346 (1996) 21

H. Asada, M. Takechi and H. Seiyama, Displacement transition in Kr/cyclohexane adsorbed on graphite: what is the driving force? 346 (1996) 294

Adatoms

M.A. Kulakov, G. Henn and B. Bullemer, SiC(0001)3 × 3–Si surface reconstruction – a new insight with a STM 346 (1996) 49

R. Ozawa, A. Yamane, K. Morikawa, M. Ohwada, K. Suzuki and H. Fukutani, Angle-resolved UPS study of the oxygen-induced 2 × 1 surface of Cu(110) 346 (1996) 237

V. Djamo, D. Teillet-Billy and J.P. Gauyacq, Resonant vibrational excitation of N_2 molecules physisorbed on a metal surface: effect of the molecular axis orientation 346 (1996) 253

Clusters

A. Clotet and G. Pacchioni, Acetylene on Cu and Pd(111) surfaces: a comparative theoretical study of bonding mechanism, adsorption sites, and vibrational spectra 346 (1996) 91

A. Sandell, J. Libuda, M. Bäumer and H.-J. Freund, Metal deposition in adsorbate atmosphere: growth and decomposition of a palladium carbonyl-like species 346 (1996) 108

Particulate composites

Powders

H. Asada, M. Takechi and H. Seiyama, Displacement transition in Kr/cyclohexane adsorbed on graphite: what is the driving force? 346 (1996) 294

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Surfaces and / or films

Semiconducting surfaces

K. Kakitani, R. Sakagami, T. Kawamura, Y. Yagi and A. Yoshimori, Step-induced short range order on Si(100) reconstructed surfaces 346 (1996) 55

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Metal–semiconductor magnetic thin film structures

G.W. Anderson, M.C. Hanf, X.R. Qin, P.R. Norton, K. Myrtle and B. Heinrich, Epitaxial growth of Fe on sulphur-passivated GaAs(100): a method for preventing As interdiffusion 346 (1996) 145